INTERNATIONAL STANDARD

ISO 14827-3

First edition 2019-01

Transport information and control systems — Data interfaces between centres for transport information and control systems —

Part 3:

Data interfaces between centres for intelligent transport sytems (ITS) using XML (Profile A)

Systèmes de commande et d'information des transports — Interfaces de données entre les centres pour systèmes de commande et d'information des transports —

Partie 3: Interfaces de données entre centres pour systèmes intelligents de transport (ITS) utilisant XML



ISO 14827-3:2019(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2019

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Fax: +41 22 749 09 47 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Cont	Page								
Forewo	iv								
Introdu	ıction			v					
		1							
	•								
			eferences						
3	Terms	and d	efinitions						
4 9	Symbol	4							
5 (Confor	5							
6	Messag	5							
			al						
(
		6.2.1	General						
		6.2.2	General message structure						
		6.2.3	Subscription message structure						
		6.2.4	Publication message structure						
		6.2.5	Receipt message structure						
(rith SOAP						
		6.3.1 6.3.2	General message structure						
		6.3.3	Request message structure						
		6.3.4	Response message structure						
f			rithout SOAP						
`		6.4.1	General						
		6.4.2	General message structure						
		6.4.3	Request message structure						
	(6.4.4	Response message structure						
Annex A	A (norn	native]	Functional Exchange Profile (FEP)	11					
Annex l	B (norn	native]	Tag scripts for composing XML messages	14					
Annex (C (norn	native)) Protocol usage methods	24					
Annex l	D (infor	mativ	ve) Message structures	26					
Bibliog	raphy			27					

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 204, *Intelligent transport systems*.

A list of all parts in the ISO 14827 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The relationship between this document and other standards in the ISO 14827 series is as follows.

ISO 14827-1 defines fundamental requirements of messages exchanged among centres. ISO 14827-2 defines ASN.1 formats to implement messages over ASN.1 platform. This document conforms to the fundamental requirements defined in ISO 14827-1 and defines requirements on XML messages to implement messages using XML. There is no compatibility between ASN.1 messages defined by ISO 14827-2 and XML messages defined by this document.

This document is not intended to conflict with existing standards on interfaces of data exchange among ITS centres.

Transport information and control systems — Data interfaces between centres for transport information and control systems —

Part 3:

Data interfaces between centres for intelligent transport sytems (ITS) using XML (Profile A)

1 Scope

This document is applicable to data exchange between different systems. This document defines the message rules and procedures for communication between transport information and control systems using XML. This document clarifies how to package end-application messages and relevant data. This document defines the mechanism to request end-application data from the client and to deliver the requested data from the supplier. Several profiles are defined, however only Profile A is defined in this document. Other profiles will be defined in future parts of the ISO 14827 series of standards. A system can be both a client and a supplier of another system simultaneously, using multiple sessions.

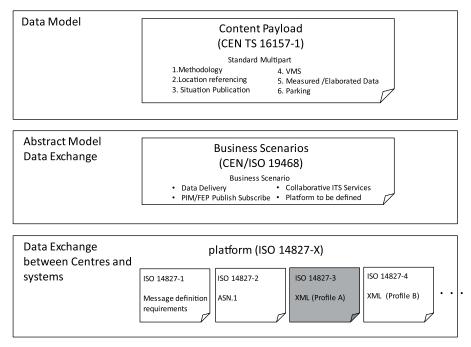


Figure 1 — Relationship between related documents

Rules and procedures for exchanging data-packets in lower layers are out of scope of this document. These functionalities can be implemented using generic protocols defined in the industrial standards. However this document defines how to use these protocols.

Data definition used in specific end-applications is out of scope in this document.

A network following this document comprises multiple kinds of systems. Each system can be viewed as an element including databases and interfaces, as shown in Figure 2: